

## DHMH Hardware and Software Standards

(Updated February 2016)

These standards were developed by the Office of Information Technology and will be periodically reviewed and revised based on emerging technologies and software development. These standards reflect the minimum configuration level.

### Computer and Laptop Hardware Standards

<b>Desktop Computer (Option 1)</b>		
<b>Category</b>	<b>Standard</b>	<b>Comment</b>
Manufacturer/Model	Dell OptiPlex 7040	
Processor	Intel Core i5	
Processor Speed	atleast 3.2 GHz	
Network Interface	10/100/1000 Ethernet	
Storage	atleast 500GB	
Memory	atleast 8GB	
DVD	8X DVD+/-RW	
<b>Desktop Computer (Option 2)</b>		
<b>Category</b>	<b>Standard</b>	<b>Comment</b>
Manufacturer/Model	Dell Precision T3620	
Processor	Intel Xeon Quad Core	
Processor Speed	atleast 3.40GHz	
Network Interface	10/100/1000 Ethernet	
Storage	atleast 1TB	
Memory	atleast 16GB	
DVD	16X DVD +/-RW and 16X DVD	
<b>Laptop Computer (Option 1)</b>		
<b>Category</b>	<b>Standard</b>	<b>Comment</b>
Manufacturer/Model	Dell Latitude E6540	
Processor	Intel Core i5	
Processor Speed	atleast 2.70GHz	
Network Interface	10/100/1000 Ethernet	
Wireless Network Adapter	802.11 g/n	
Storage	atleast 500GB, 7200RPM	
Memory	atleast 8.0GB	
DVD	8X DVD +/-RW	
Display Size	atleast 14.0"	
<b>Laptop Computer (Option 2)</b>		
<b>Category</b>	<b>Standard</b>	<b>Comment</b>
Manufacturer/Model	Dell Precision M6800	
Processor	Intel Core i7 Dual Core	
Processor Speed	atleast 2.9GHz	
Network Interface	10/100/1000 Ethernet	
Wireless Network Adapter	802.11 g/n	
Storage	atleast 750GB, 7200RPM atleast 512GB, SSD	
Memory	atleast 16.0GB	
DVD	8X DV D +/-RW	
Display Size	17.3"	
<b>Mobile Computer</b>		
<b>Category</b>	<b>Standard</b>	<b>Comment</b>
Tablet	Microsoft Surface	

Monitor		
Category	Standard	Comment
Manufacturer/Model	Dell, LG, HP, NEC, ViewSonic, Samsung	
Size	At least 21" diagonal	
Signal Input	VGA DVI-D with HDCP	<i>analog signal</i> <i>digital video</i>
Dot Pitch	0.264mm or better	

### Computer and Laptop Software Standards

PC/Laptop Software Standards		
Category	Standard	Comment
Operating System	Windows 7 Professional or Enterprise Windows 10* Enterprise or Enterprise	* Windows 10 is acceptable provided local IT staff can support it and have verified its compatibility with applications, audio/video and peripherals in use at local site. DHMH OIT does not offer any Win 10 support at this time.
Office Application	Microsoft Office 2013 Professional	
Project Management	Microsoft Project Professional 2013	
Diagramming	Microsoft Visio Professional 2013	
Web Content Development	Microsoft SharePoint 2010	
Anti-Virus	Symantec Endpoint Protection v.12	
Email	Google Gmail	
Web Browser	Google Chrome Internet Explorer v.9 Mozilla Firefox v. 43	
Compression Software	WinZip v.20	
Self-Extracting Compression Software	WinZip Self-Extractor v.4.0	
Document Reader	Adobe Reader XI	
Document Publishing	Adobe Acrobat XI Pro	
3270 Terminal Emulation	RUMBA v.9.x Attachmate Reflection 2014	
Web Conferencing	Cisco WebEx	

### Server Hardware Standards

Server Hardware (Self Contained - Rack Mount)		
Category	Standard	Comment
Server Make & Model	Dell PowerEdge R730	
Processor	Intel Xeon E5-26xx	
Memory	96GB	
Controller	RAID 5	
Disk Storage	atleast 3 x 1TB	
Network Interface Card	dual port Gigabit NIC	
Remote Access Card	iDRAC8	

<b>Server Hardware (Self Contained - Tower) Note: Tower systems not permitted in 201 Bldg Data Center</b>		
<b>Category</b>	<b>Standard</b>	<b>Comment</b>
Server Make & Model	Dell PowerEdge T330	
Processor	Intel Xeon E3	
Memory	64GB	
Controller	RAID 5	
Disk Storage	atleast 3 x 1TB	
Network Interface Card	dual port Gigabit NIC	
Remote Access Card	iDRAC8	
<b>Server Hardware (Virtualization Server - SAN Attached - Rack Mount)</b>		
<b>Category</b>	<b>Standard</b>	<b>Comment</b>
Server Make & Model	Dell PowerEdge R930	
Processor	atleast 2 x Intel Xeon E7	
Memory	atleast 192GB	depends on number of virtual servers
Controller	RAID 5	
Disk Storage	atleast 3 x 600GB 10K RPM	
Network Interface Card	quad port Gigabit NIC	depends on number of virtual servers
Fiber Channel Host Bus Adapter	atleast 1 dual 2/4/8GB	depends on number of virtual servers
Remote Access Card	iDRAC8 Enterprise	
<b>Storage Area Network (SAN)</b>		
<b>Category</b>	<b>Standard</b>	<b>Comment</b>
SAN Make & Model	NetApp FAS Series	

### **Server Software Standards**

<b>Server Software Standards - General</b>		
<b>Category</b>	<b>Standard</b>	<b>Comment</b>
Operating System	Windows Server 2012 R2	
Server Virtualization	VMware vCloud Suite	
Back-Up	Symantec Back-Up Exec 15 NetApp SnapProtect	
Asset Management	Microsoft System Center Configuration Manager 2012 R2	
Patch Deployment	Microsoft System Center Configuration Manager 2012 R2	
Remote Administration	Microsoft System Center Configuration Manager 2012 R2	
Anti-Virus	Symantec Endpoint Protection v.12	
Email/Messaging	Google Gmail	
HelpDesk	Solarwinds Web Help Desk	
IP Address Allocation	Microsoft DHCP Windows Server 2012 R2	
Name Resolution	Microsoft DNS Windows Server 2012 R2	
Directory Services Authentication	Microsoft Active Directory	Windows 2012 Functionality

### **Network Infrastructure Standards**

<b>Network Connectivity Standards</b>		
<b>Category</b>	<b>Standard</b>	<b>Comment</b>
Wireless Access Point	Cisco Aironet Series	
Switch (Local Area Network)	Cisco Catalyst Series	